

## **Drilling exploratory shafts in front of Bertha**

On Jan. 8, 2014, crews finished drilling the second of four planned exploratory shafts in front of Bertha, the SR 99 tunneling machine. These shafts are being installed where earlier probing detected metal in front of the machine.

The shafts will be used to further identify the limits of any metal in front of the machine and remove as much of it as possible. If no objects are detected or removed from the shafts, the shafts will be filled to form part of an underground barrier that will create a safe environment for workers to enter the machine's excavation chamber.

Crews are continuing to gather information about any other factors that might have contributed to the stoppage of tunneling last month. The overall cause of the tunneling slowdown will not be known until the investigation is completed.







